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GETTING PERSONAL: PREVENTING LEADERSHIP FAILURE
IN A HIGH TECH AIR FORCE

by

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Preface

I first became interested in the influence of high technology communication on interpersonal skills in fall 2007. That semester, I audited a Leadership in Organizations course before it was offered to senior military cadets the following semester. Another officer auditing the course commented that cadets were becoming hesitant to carry on a face-to-face conversation with each other due to a general over-reliance on electronic communication. Around the same time I heard a story about a young lieutenant who did not know how to be credible in front of his troops even though he knew the definition of leadership by heart. As an Air Force Reserve Officer Training Corps instructor, I am charged with producing quality leaders for the Air Force. I feel the Air Force needs a more robust interpersonal skills training program to ensure its future leaders have the interpersonal skills they need to effectively accomplish the mission.

I would like to express my sincere and heartfelt thanks to my husband, Rob, for his unconditional support as I worked towards my master's degree. I am forever indebted to the sacrifices he is making so I can pursue my career goals. I would also like to acknowledge Brigadier General Michael Bissell, Colonel L.E. Hurlbut and Colonel Thomas Meriwether for their guidance with my research and allowing me to interview them. I respect their professional opinions and appreciate their time. Furthermore, I am grateful for the help Megan Newman, Interlibrary Loan Manager at Preston Library and Paul Barron, Director of Library and Archives at the Marshall Foundation provided throughout my research journey. Their enthusiasm for finding credible sources helped me more efficiently conduct my research. Finally, I would like to thank my ACSC research instructors, Dr. Dennis Duffin and Colonel Fred Stone for their honest and timely feedback. I learned valuable lessons about professional writing and conducting research that I will carry with me throughout the rest of my Air Force career.

Abstract

Email and texting are common ways of communicating in the 21st century Air Force. Leadership requires intangible skills such as influence, discipline and motivation. These skills could be compromised if future Air Force leaders who rely on means of computer-mediated-communication do not also practice interpersonal skills. Future leaders should learn to effectively balance the use of technology with face-to-face interaction in their organizations. The Air Force needs a more effective way of providing its future leaders with the interpersonal skills training necessary to successfully accomplish its mission. This research paper examines the potential problem high technology communication poses on leadership and seeks to discover ways to improve interpersonal skills training in the Air Force. It uses a problem/solution framework to answer the question: How can the USAF transform interpersonal skills training to counteract its future leaders' over-reliance on high tech communication devices? This thesis defines five criteria which are based on the personal leadership competency in the Air Force's force development framework and uses these criteria to compare and contrast four interpersonal skills training programs. It recommends using a combination of interpersonal skills training programs conducted in a course-break-course format in order to ultimately support long-term leadership improvement.

Section 1: Introduction

Context

To become successful leaders, we must first learn that no matter how good the technology or how shiny the equipment, people-to-people relations get things done in our organizations. People are the assets that determine our success or failure. If you are to be a good leader, you have to cultivate your skills in the arena of personal relations.

--General Ronald Fogleman
Chief of Staff of the USAF
October 1994-August 1997

The benefits of technology are clear. The Air Force is committed to working with the latest information and cutting edge technology to accomplish its mission: To Fly, Fight and Win in Air, Space and Cyberspace. One of its core competencies, technology-to-warfighting, is more prevalent today than ever before as airmen exploit the limits of cyberspace. Now more than ever, instant cyberspace communication has proven its operational value to the military as it affords unprecedented access to information.¹

General Ronald Fogleman, former Chief of Staff of the US Air Force, offers timeless advice for current and future generations of Air Force leaders alike. Rising Air Force leaders currently in college, born during the 1980s and early 1990s, are part of “Generation Y,” otherwise known as “the Millennial Generation.”² These young men and women are considered “Digital Natives” because they are all “native speakers” of the digital language of computers, video games and the Internet.³ Their tendencies are characterized by an increased use and familiarity with the latest developments in information and communication technology. The fact that these future Air Force leaders will have communicated via email and text messaging most of their lives can benefit the Air Force, meeting its needs for innovation in integrating the latest advances in technology.

“Digital Immigrants,” ones not born into the digital world but rather ones who have adapted to high technology,⁴ should ensure the natural learning tendencies of the Digital Natives are met. The perspectives and supporting skills of these “Generation X” executives (i.e. ones who were born during the 1960s and 1970s)⁵ and senior leaders who will be in charge of the Millennial Generation must keep pace with advances in technology in order to better relate to the needs of their subordinates.⁶

Background

Current Air Force officer accession programs define interpersonal communication as “the process whereby understanding is achieved between individuals”⁷ and leadership as “the art and science of influencing and directing people to accomplish a mission.”⁸ Pieced together, communication is fundamental to leadership, making interpersonal skills vital to mission accomplishment.

It is largely accepted that leaders must continually sharpen their interpersonal communication skills in order to effectively influence, discipline and motivate personnel under their command. Officers and NCOs who lead at the tactical level need to communicate instructions and ideas so others will understand specific operational objectives. Leaders at the operational and strategic levels need higher-order oral and written communication skills including developing logical arguments and expressing information in a persuasive manner.⁹

What is not clear is how or if an over-reliance on high tech communication means will challenge interpersonal skills development. Are these skills getting lost in the process of integrating high tech communication-related technology into day-to-day operations? If so, is technology increasing communication errors, and in turn causing leadership failures? This paper seeks to define this potential problem and recommend an effective interpersonal skills training program to solve it.

Leadership is commonly learned through a triad of education, training and experience. In an interview with Brigadier General Michael Bissell, Commandant of the Virginia Women's Institute for Leadership for 15 years, he told of an experience from his early active duty Army career when he was assigned as the Director of flight training at Fort Rucker. He met with the young officers assigned to him and asked what was on their minds. After a few minutes of silence a young lieutenant commented he did not know how to stand in front of his troops and be credible. He went on to explain he could essentially recite all the leadership definitions and theories from rote memorization but he never quite grasped how to relate to the troops.¹⁰ This young lieutenant's comment is still echoed by junior and senior level Air Force ROTC cadets today. While the Air Force currently does the entry-level education piece well, this paper seeks to find out if there is a better way to provide interpersonal skills training for a more positive leadership experience throughout a leader's career.

Chief Master Sergeant of the Air Force Robert Gaylor once said, "Sure, everyone wants to be an effective leader, whether it be in the Air Force or in the community. You can and will be if you identify your strengths, capitalize on them, and consciously strive to reduce and minimize the times you apply your style inappropriately."¹¹ One important aspect to leadership development is getting to know one's own personality and leadership style in order to more confidently overcome one's perceived or noticeable insecurities. This is the area in which the Air Force's current interpersonal skills training focuses.

This paper will explore three leading training programs in interpersonal skills: the Myers-Briggs Type Indicator® (MBTI) model from CPP Inc. which explains personalities based on tendencies; the DiSC® model from Inscape Publishing which explores four distinct behavior types; and the Social Style model™ from the TRACOM Group which gauges individuals on two dimensions of behavior.¹² It will also explore the Positive Performance staff development

training program from the United Kingdom. While the Air Force historically used the MBTI model in its accessions programs and supervisor training courses, it began using the DiSC model in fall of 2009. The objective is to find out which one of these proven interpersonal skills training programs fits the needs of the Air Force's future leaders.

Research Question/Thesis

This study seeks to answer: How can the USAF transform interpersonal skills training to counteract its future leaders' over-reliance on high tech communication devices? This thesis will investigate whether the tendency of the Air Force's Millennial-Generation leaders to over-rely on means of advanced communication poses a danger to their ability to effectively lead future airmen. It explores several possible alternatives for solving the problem, and recommends a solution that will help the Air Force's future leaders successfully balance electronic communication with face-to-face and verbal forms of communication.

Overview

This research paper uses a problem/solution framework to answer the question: How can the USAF transform interpersonal skills training to counteract its future leaders' over-reliance on high tech communication devices? Section 1 defines leadership, explains the importance of interpersonal communication skills and provides an overview of the problem associated with an over-reliance on computer-mediated-communication. Section 2 discusses the positive aspects of high technology as well as the negative effects high technology has on leadership and interpersonal communication skills. Section 3 defines the criteria used for selecting alternate solutions to the problem. The five categories of criteria explored are: self assessment, effective communication, leadership development, management skills and training delivery method. Section 4 describes four interpersonal skill training alternatives: the MBTI model, the DiSC model, the Social Style model and Positive Performance. Section 5 applies the criteria defined in

Section 3 to the alternatives described in Section 4 in order to determine if and how they can be applied to the needs of the Air Force. Section 6 summarizes the findings and recommends a solution along with ways to implement that solution in an effort to effectively resolve the problem. The conclusion in Section 7 provides a summary of the information presented in the paper.

Section 2: Problem Description

After giving a speech on leadership to Air Force ROTC cadets, General (Retired) John Jumper, former Chief of Staff of the US Air Force, opened the floor for questions. A cadet in his second year of Air Force ROTC stood up, introduced himself, and asked, “What is the biggest mistake a leader can make?” With no hesitation General Jumper replied, “Leadership by email.” He went on to explain, “Leadership is a face-to-face human exercise; there’s no other way to do it. Ninety percent of good leadership is just being there.”¹³ While means of high tech communication serve as effective management tools, they pose a threat to leadership if used excessively.

In many ways technology has had a positive influence on current Air Force operations by offering quick communication. Email and text messaging are common examples. Contrary to General Jumper’s statement, a 2002 Pew Internet and American Life Project titled “Email at Work” concluded, “...the large majority of those who use email at work say their experience with email is manageable.”¹⁴ When used correctly, email allows leaders to easily communicate with a large number of local and geographically separated airmen. In many cases email allows for the quick sharing and editing of documents and reference to previous communication for a documented communication trail. Email also saves paper and is an efficient, inexpensive way to communicate with members both in and outside of an organization. Next, text messaging can be

used at times when taking a phone call is socially inappropriate. Sending a text in a meeting is less intrusive and quicker than making a phone call. And, while telephone and face-to-face communication is received randomly, at times when the recipient is focused on another task, both email and text messages are received when the recipient is ready.

In all, these means of high tech communication allow for individuals to be in constant contact which can be comforting for supervisors. Being “tech savvy” can help a supervisor “bridge” the generational gap, creating a more effective relationship between Digital Immigrants and Digital Natives. High tech communication devices can be very useful tools if used properly.

However, being technically proficient does not equate to being a competent leader. A report by the US Office of Personnel Management in 2001 stated: “...supervisors often bring technical knowledge to the job, but not necessarily the...interpersonal and management skills that are needed to lead people.”¹⁵ US Air Force Deputy Assistant Secretary for Acquisition Integration, Blaise Durante, addressed a similar concern in 2006. He found that Acquisition personnel were being promoted to supervisory positions primarily for their technical ability rather than leadership skill. He believed this contributed to overall poor management and stifled innovation since “they tend[ed] to think of [leadership] in technical terms and overlook[ed] its interpersonal aspects.”¹⁶ All Air Force career fields could face this same concern if the Air Force’s future leaders tend to over-rely on means of high tech communication in leadership roles. This could result in lower levels of productivity and negatively impact mission accomplishment.

Email and text messaging also have several distinct disadvantages which can create barriers to effective communication. First and foremost, they do not impart tone to their words. While this may be due to an individual’s limited ability to effectively convey his or her interpersonal skills through the technology medium, research shows that in some situations

nonverbal cues are more important. University of California Los Angeles Professor of Psychology, Dr. Albert Mehrabian estimated that in interaction involving feelings and attitudes the actual meaning of words accounts for a mere seven percent of communication, tone of voice accounts for 38 percent, and visible signals (facial expression, body language, gestures, etc.) account for the remaining 55 percent of the communication that takes place.¹⁷ Although his estimation does not apply to every situation, some believe that interpreting the real meaning of what is being communicated in written conversations requires “reading between the lines”; this can be a vague, intangible, and uncertain effort when tone and body language are removed.¹⁸ As an added layer of uncertainty, each situation carries a unique context that defines what meaning and responses are appropriate for the individuals involved.¹⁹ Cary Cooper CBE, a professor of organizational psychology at the United Kingdom’s Lancaster University, agrees: “Face-to-face, you can gauge emotions; texts and emails can be misleading.”²⁰ Since email and text communication is built solely on words, misunderstandings happen far more often.

However, others believe the anonymity of texting is what makes it so popular. Louis Menand, Ph.D., a staff writer for *The New Yorker*, commented, “People don’t want to have to perform the amount of self-preservation that is required in a personal encounter. They don’t want to deal with the facial expressions, the body language, the obligation to be witty or interesting.”²¹ This could raise a concern for the Air Force if its future leaders tend to avoid personal contact.

Feedback, another critical part of communication, is also largely absent. When used incorrectly or relied upon too heavily, high tech communication tools prevent valuable communication via body language and tone of voice, and rob the sender of the feedback needed to confirm mutual understanding of the message. The emoticons – the happy faces and variations of punctuations – can be poor and annoying substitutes.²² This absence of body

language, tone of voice and feedback is closely linked to another barrier to effective communication, conflict.

Email and text messaging, which often afford the feeling of at least partial anonymity, have the tendency to create conflict more so than other traditional communication mediums. Colonel L. E. Hurlbut, Deputy Commandant of Cadet Life at the Virginia Military Institute, has a master's degree in counseling, 26 years experience active duty, plus nine years of experience observing the social tendencies of military college cadets – many of whom will soon become junior military officers. In a recent interview, she noted a shift in interpersonal communication amongst the cadets over the last decade. She observed that an over-reliance on email and text messaging has encouraged a lack of good judgment. She commented, “It is easier to exercise poor judgment when not in [face-to-face] contact with the person.”²³ She explained that cadets post comments they would not have said had the cadet been in a face-to-face conversation. Her observation is backed by an Associated Press-AOL poll done in November 2007 which found that 43 percent of teenagers will use instant messaging to say things they will not say face-to-face.²⁴

Another related disadvantage is that high tech communication devices pose challenges to resolving conflict. Robert Bacal, CEO of Bacal and Associates consulting firm, uses basic communication theory to discuss the difference between face-to-face and email communication in his book. He explains that face-to-face communication between two individuals involves simultaneously sending and receiving information as verbal and nonverbal cues are exchanged. In effect, both parties serve as the sender and receiver of the message at the same time. Email communication, on the other hand, is telegraphic and sequential; the sender sends a message to the recipient, waits for a response, and then responds to that. He concludes, “The closer a

medium is to telegraphic communication, the more likely it is to end up creating conflict, and the more difficult it is to resolve conflict using that medium.”²⁵

Assistant Professor of Communication from the University of Texas, Dr. Jeffrey McQuillen, offers a different viewpoint. He argues that the growing dependence on technology is allowing individuals to become more self-sufficient.²⁶ He explains the need for social contact, in many cases, is being filled by computer-mediated-communication. However, he also describes the paradox that results: “one can be closer because some form of contact is experienced [through the media] and further apart because that contact serves to create a less accurate representation of the participants and their messages.”²⁷ Associate Professor of Communication Studies at the University of California Los Angeles, Tim Groeling concurs: “I don’t think [the abundant texting] will lead to shallow relationships. I do think it will lead to a withering of interpersonal skills.”²⁸ Is this less accurate representation in computer-mediated communication leading to conflict and making conflict resolution more challenging?

It is difficult to convey a supportive tone in email. Today’s distributed nature of military operations requires Air Force leaders to confront the additional obstacle of leading from afar. There is a temptation to conduct all business from the computer due to time zone differences. However, leaders make their task far more challenging if they attempt to inspire their team solely through computer-mediated writing.²⁹

In his book, *Work Motivation in Organizational Behavior*, author Craig Pinder explains the need for “interactional justice” in an organization; individuals “are sensitive to the quality of interpersonal treatment they receive during the enactment of organizational procedures.”³⁰ Leaders need to distinguish when communication should occur verbally or face-to-face rather than via email or text messaging. Discipline, for example, is best received when conducted face-to-face. This preference was revealed in 2002 by Deborah Fallows, a senior research fellow for

the Pew Internet and American Life Project: “85 percent of work emailers prefer to have conversations when they are dealing with workplace problems and sensitive issues.”³¹

Interpersonal skills training for future Air Force leaders should address this concern.

A fifth disadvantage of high technology is the tendency for communication overload. Email and text messaging are common contributors to communication overload. According to data released in December 2009 by the Census Bureau, “Americans fired off 110 billion text messages in December 2008. In the same month in 2007, they sent 48 billion.”³² More information comes across the computer monitor than ever. Lieutenant Colonel Jeffry Smith addresses the issue of communicative leadership in his book, *Commanding an Air Force Squadron in the Twenty-First Century*. He provides an example of a commander who was overwhelmed by the volume of email coming to his desk shortly after he took command: “He’d often get more than 100 E-mails a day, some of which required responses that were taking up a great deal of his time...it was keeping [him] chained to [his] desk where [he] couldn’t get out to talk with folks. Something had to be done.”³³ In a typical day, it is becoming increasingly difficult to determine which information should receive attention and which should be deleted without hesitation. Andrew J. DuBrin, PhD., is an accomplished author and researcher in the field of business psychology. His book on applying psychology suggests a person’s information overload “acts as a communication barrier because people have a tendency to block out new information when their capacity to absorb information becomes taxed.”³⁴ No matter what the medium, too much information can degrade the importance of a message and weaken its impact.

Finally, means of high tech communication encourage “microblogging,” short messages that use abbreviations, acronyms, single letters and numbers in place of whole words and complete thoughts. While these shortcuts are more convenient in peer-to-peer text-based communication, some educators and observers believe they pose a threat to the preservation of

written communication skills.³⁵ Sixty percent of teens who participated in the Pew Internet and American Life Project survey on writing in 2007, however, did not consider electronic personal communication to be “writing.”³⁶ On the other hand, 64 percent of the teens surveyed did admit that their informal text-based communication styles bleed over into their writing at school, though they reported much of the writing they are assigned is relatively informal.³⁷ As the Air Force is a cross section of society, there may be a concern that its future leaders will be less capable of communicating both through written and spoken word in a professional manner.

In all, an over-reliance on computer-mediated-communication could lead to dependencies and result in leader vulnerabilities. If a leader chooses to lead by email, avoiding difficult face-to-face conversations, what does he or she have to fall back on when the network is down? The same question applies to text messaging capabilities. A leader should know the “pulse” of his or her organization. Looking a subordinate in the eye is a critical part of finding out something as simple as how his or her day is going. Studies conducted by the Cutter Consortium, an American Information Technology research company show, “a lack of interpersonal skills is the main cause of leadership failure.”³⁸ A leader’s personnel are vital to mission accomplishment; at least 25 percent of a leader’s time should be spent “out with the troops.”³⁹

High technology methods of communication are here to stay but present a challenge to the Air Force’s method of interpersonal skills development. Lieutenant General Charles Croom, Director, Defense Information Systems Agency points out that no nation is more dependent on cyberspace than the United States.⁴⁰ Obviously, the Air Force should not simply discard the many advantages of email and texting. Instead, it needs to educate its new leaders who are adept at using this technology on the pitfalls of relying too heavily or exclusively on these methods. More importantly, it needs to provide training that will enhance their interpersonal skills.

Section 3: Criteria

Although the essential elements of military leadership never change, technology, an essential instrument of mission success, is in constant flux. The challenge for the military leader is to recognize and use whatever technology is available; to dominate the technology, not be dominated by it.

--Brigadier General Stuart Boyd
Former Commandant of the Air Force Institute of Technology

Overall, any solution to this problem should fit into the Air Force's force development framework, starting with a focus on personal leadership. Air Force Doctrine Document (AFDD) 1-1, *Leadership and Force Development*, defines force development as "a series of experiences and challenges, combined with education and training opportunities that are directed at producing Airmen who possess the requisite skills, knowledge, experience, and motivation to lead and execute the full spectrum of Air Force missions."⁴¹ As a foundation to this framework, AFDD 1-1 lists enduring leadership competencies; the Personal Leadership competency "focuses on face-to-face, interpersonal relations that directly influence human behavior and values."⁴² This leadership is exercised at all levels—tactical, operational, and strategic.

Alternatives should afford self assessment—getting to know one's own interpersonal styles to overcome insecurities—and inspire an interest in self awareness. They should also provide training in the areas of effective communication, leadership development and basic management skills; fundamental interpersonal skills that will ideally be reinforced by on-the-job training and expeditionary field experience.⁴³ Furthermore, as delivery methods of training can be just as important as content, the alternatives should be able to relate to the Digital Natives.

Self Assessment

Assessing one's values, personal strengths and weaknesses along with performance preferences and learning style is important in understanding how personal leadership style and skill impact decisions and relationships with others.⁴⁴ Retired Army Lieutenant General Walter

Ulmer, Jr. served for nine years as President and CEO of the Center for Creative Leadership after his military career. He gave a speech to ROTC cadets on 15 March 2009 titled “Getting Ready to Lead in the 21st Century” and addressed the importance of this topic: “Self awareness is vital to continuing development as a leader.”⁴⁵ He also declared that leaders rarely fail from technical competence alone; interpersonal skills make a difference.⁴⁶ Assessing self is one important aspect of the personal leadership competency in the force development construct.

Effective Communication

Another critical aspect is fostering effective communication. Active listening and influencing others indirectly through writing and speaking are skills that future Air Force leaders need to learn or hone.⁴⁷ Given the potential negative effect of “microblogging” on written communication skills, the alternatives should address ways to express complete thoughts and ideas clearly, concisely and with impact. They should also address email etiquette, describing the ramifications of sending messages in all capitals or using email to send angry notes to others. In all they should teach ways to constantly evaluate the effectiveness of one’s communication.

Leadership Development

Leadership development at the tactical level should allow airmen to learn about themselves as leaders and about how their leadership skills can affect others.⁴⁸ The solution should address the potential pitfalls of an over-reliance on high technology communication and its effects on leadership. Airmen should learn and gain experience applying intangible leadership skills best accomplished through face-to-face interactions.⁴⁹ Examples include influencing peers, motivating subordinates and reinforcing discipline.

Management Skills

The solution should also acknowledge basic management skills such as efficiency and effectiveness in leadership and build on these skills. Within this parameter, the alternatives

should address a leader's proper use of high technology as a management tool and support a balance between computer-mediated communication and face-to-face interactions.

Training Delivery Method

As a final criterion, the method of interpersonal skills training should meet the needs of future Air Force leaders while keeping pace with changing operational environments. It should keep their interest by reflecting the stress and challenges of operating in an environment of total information in wartime, while taking into account their relative inexperience.⁵⁰ To do this, it should include a mix of instruction, case studies and application. Furthermore, it should also be available to deployed airmen through online or other reachback capabilities. The training, however, should not be completely dependent on computerized methods which would inhibit airmen from learning to make decisions based on intuition that comes into play in military operational art.

Lawrence Hanser, Ph.D., has been working with the US military on force development issues for almost 30 years. In 2008, in his current position as senior behavioral scientist at RAND, he conducted a study on the Air Force "Force Development" initiative.⁵¹ This study concluded: "No one knows for certain which newly commissioned Air Force officers will become senior leaders...The force development initiative is about planting enough seeds in the right soil to ensure an abundant yield of outstanding leaders year after year."⁵² No matter which career fields the Air Force's future leaders pursue, interpersonal skills remain important to the accomplishment of the Air Force mission.

Section 4: Alternative Interpersonal Skills Training Models

The four alternative Interpersonal Skills training models presented in this paper are the Myers-Briggs Type Indicator[®] model from CPP Inc., which explains personalities based on

tendencies; the DiSC[®] model from Inscape Publishing which explores four distinct behavior types; the Social Style model[™] from the TRACOM Group which gauges individuals on two dimensions of behavior; and the tailorable Positive Performance training program from the United Kingdom. This section describes each training model while the next section will compare them against the criteria.

Myers-Briggs Type Indicator[®] (MBTI)

The MBTI model was developed in the 1950s as an instrument for determining personality types. It is based on theories of psychiatrist Dr. Carl Jung and assumes much of human personality can be defined by dividing it into four independent preference areas, each of which is broken down into two opposites.⁵³ The four scales, the preferences for each of the four scales and the 16 resulting personality types are listed in Table 1 below. The Air Force has used this assessment in its accessions' leadership courses, Professional Military Education (PME) classes, and in its active duty supervisor training courses for interpersonal skills training.

Table 1: Myers-Briggs Type Indicator[®] Scales, Preferences and Types

<i>Scale</i>	<i>Preference</i>	<i>The 16 Types</i>			
Energizing	Extroversion (E)	ISTJ	ISFJ	INFJ	INTJ
	Introversion (I)				
Attending	Sensing (S)	ISTP	ISFP	INFP	INTP
	Intuition (N)				
Deciding	Thinking (T)	ESTP	ESFP	ENFP	ENTP
	Feeling (F)				
Living	Judgment (J)	ESTJ	ESFJ	ENFJ	ENTJ
	Perception (P)				

Adapted from Myers Briggs Type Indicator, "Theory Behind the Model,"
<http://web.cortland.edu/andersmd/learning/MBTI.htm>.

The Energizing scale defines how an individual is energized, either as an extrovert who prefers to draw energy from the outside world or as an introvert who prefers to draw energy from within. The Attending scale defines what an individual pays attention to, either sensing what is

real or using intuition to envision what is possible. The Deciding scale defines how an individual decides, either in a logical, objective way (thinking) or in a personal, value-oriented way (feeling). The last scale, Living, explains the life style an individual prefers, either one that is planned and organized (judgment) or one that is spontaneous and flexible (perception).⁵⁴

DiSC® Model

A different approach to interpersonal skill awareness is the behavior pattern-focused DiSC® model from Inscape Publishing, which is based on theories of and created by psychologist Dr. William Marston.⁵⁵ “DiSC” is an acronym for Dominance, Influence, Steadiness and Conscientiousness. This model explores four distinct behavior types in order to explain how respondents tend to behave when they react emotionally to their environment.⁵⁶ The first behavior type, Dominance, describes someone who focuses on solving problems and getting immediate results. The second, Influence, describes an individual who has a tendency to persuade and influence others. The third behavior type, Steadiness, describes one who is driven to create a stable, organized environment. The fourth and final dimension, Conscientiousness, is related to someone who is motivated to achieve high personal standards.⁵⁷ An assessment of how an individual may respond in a selected focus (e.g., work, home, or school) is taken to reveal which of the dimensions of behavior is primary, and which is secondary. Air Force accession programs began using this instrument in fall 2009 as a part of their leadership training courses.

Social Style Model™

The Social Style model™ from the TRACOM Group also gauges individuals on dimensions of behavior, but uses only two: assertive and responsive, instead of four. By combining assertive and responsive behaviors, a person is charted into one of four quadrants or Social Style positions: Amiable, Driving, Analytical, or Expressive.⁵⁸ Amiable individuals are described as easy-going and supportive. Driving individuals are seen as strong-willed and more

emotionally controlled. Analytical individuals are viewed as serious and more exacting. Expressive individuals are described as outgoing and more dramatic.⁵⁹ The model uses both a self-rating and a multi-rater assessment approach to provide the respondent with an objective assessment of his or her Social Style.

Positive Performance

Positive Performance is a business and organizational change training company based out of the United Kingdom. It is headed by Corporate Coach and NLP Practitioner, Wendy Chalmers Mill, and claims to offer “tailor made” training programs based on an organization’s needs.⁶⁰ Several of its core advertised courses are relevant to this paper. “Leadership with Excellence,” is an interactive course built to support a leader’s climate for vision building. “Effective Corporate Communication and Body Language” provides training in sending and receiving nonverbal messages, including instruction in first impressions and intuition. “Email and Effective Communication” is listed as an additional training that is available.⁶¹ This company also advertises that it “resists the temptation of creating training courses from text-book strategies.”⁶²

Section 5: Comparison of Alternative Interpersonal Skills Training Models

The four alternatives have strengths and weaknesses with regards to the needs of the Air Force. In an effort to recommend a solution and ways to implement that solution, this section will weigh each alternative’s pros and cons against the five categories of criteria explained in Section 3: self assessment, effective communication, leadership development, management skills and training delivery method.

To start, the MBTI is a proven self-assessment instrument; it has been around for more than 34 years and is backed by extensive research.⁶³ The Air Force has historically used this

personality assessment in its supervisor, accessions, and PME courses as a lead-in to a leadership training program. For example, Air Command and Staff College's Leadership in Warfare course used the MBTI to make the point that "personality assessments help individuals understand their strengths and weaknesses...and [helps individuals] anticipate how their personal preferences compare and contrast with those around them."⁶⁴ Some may believe this information can help leaders realize the importance of having a mix of personality types on their team to effectively accomplish the mission. Yet critics question assessments based on personality because they may tend to cause managers to hire only a particular type of personality.⁶⁵

The purpose of the MBTI personality assessment is to make Jung's theory of psychological type useful with regards to understanding one's own personality type contributions, as well as the contributions of others, to a given situation.⁶⁶ One benefit of the MBTI is that it helps individuals understand how one's own personality preferences affect one's style of communication. Gaining this awareness helps foster effective communication.

The value of the MBTI is limited when existing organizational forces on individuals such as job position or level and individual needs are not considered because the effects of personality types are likely to be superseded by these factors.⁶⁷ This leads to restricted usefulness for understanding leadership and management behavior as well. The literature does not support a correlation between understanding personality types and predicting behavior nor does it support the supposition that once an individual takes the assessment, he or she becomes a better leader. This is likely because cognitive understanding of personality-based influences on interpersonal skills does not automatically lead to successful skill execution.⁶⁸ Thus, trainers should assess participants' needs and ensure that participants individually consider how their positions and other organizational forces influence their behavior.⁶⁹

The delivery methods for the MBTI instrument vary based on an organization's needs. The profile can be completed using CPP Inc.'s online system from SkillsOne.com. The MBTI instrument is typically offered as a self-assessment first then as a lead-in to further leadership training. While the MBTI is a strong self-assessment tool, it does not stand alone as an alternative that clearly addresses the interpersonal skills training needs of the Air Force.

The DiSC[®] model or second alternative was first introduced to Air Force accessions programs in a 2008 memorandum to AFROTC Region and Detachment Commanders seeking input for academic year 2009-2010 syllabus updates. In this memorandum, Dr. Charles Nath, III, Director for the Jeanne M. Holm Center for Officer Accession and Citizen Development Center's Curriculum Directorate, commented that the DiSC self assessment is a "valuable self-assessment tool" and "would give ROTC and OTS graduates [the] same self-assessment experience."⁷⁰ This tool was used in the fall 2009 semester. AFROTC cadets will have an opportunity to comment on its usefulness with regards to their leadership development in the Headquarters AFROTC-driven online end of academic year survey in April 2010.

As a behavior assessment, proponents of the DiSC model claim that it not only helps an individual understand himself or herself but that it also leads to an appreciation of and ready adaptation to others' styles.⁷¹ Organizational Psychologist Mitch McCrimmon, Ph.D., who has spent 25 years in management consulting, claims that if one chooses to assess personality traits, he or she will need to make inferences from the traits to one's leadership competency profile. Behavioral assessments, on the other hand, explore how participants behave on the job, thereby assessing competencies directly.⁷² The ability to adapt to others' behavioral styles is one of the core principles of DiSC behavioral thinking. When taking the DiSC assessment, an individual chooses adjectives or phrases that describe himself or herself on a point scale in a given environment or situation. Individual responses are plotted on a DiSC Graph, which reveals one's

highest DiSC dimension(s), potential strengths and weaknesses, and one's Classical Profile Pattern.⁷³ One could argue that behaviors change depending on the situation and that the results are only valid some of the time. Recognition of this helps develop self awareness.

Effectiveness of one's communication can be derived from studying the results section of the DiSC assessment which explains 15 classical profile patterns, each portraying the behavior of individuals with a specific blend of the four DiSC dimensions.⁷⁴ As with the MBTI, this assessment is best used as a lead-in to leadership training because it provides feedback to the individual based on behavioral tendencies. More needs to be done though to help individuals practice effective communication techniques and meet the interpersonal skills training needs of the Air Force.

Management skills are indirectly addressed in the DiSC profile pattern description section of the assessment which explains how one could increase his or her effectiveness in the areas of improving relationship management, teamwork and productivity.⁷⁵ This profile can be completed using Inscape's online system prior to attending an interpersonal skills training program. It is typically administered to a group or team by a facilitator to help interpret an individual's results.

As with DiSC, the third alternative examined – the Social Style model™, assesses individuals' basic behaviors and their preferences for behavioral styles and meets the criteria for self-assessment. This model is typically integrated into management, team and individual development training programs with inferences made towards leadership applications. The key difference between this, MBTI and DiSC is "building familiarity and comfort with the behaviors of each Style and learning the importance of versatility."⁷⁶ The TRACOM Group describes versatility as the ability to adjust one's behaviors in each situation in order to maximize productivity.⁷⁷ The TRACOM Group's claim that social and self-awareness are important to

interpersonal success is backed by internationally known psychologist, Daniel Goleman in his book, *Emotional Intelligence*, which explores interpersonal and personal strengths.⁷⁸

The Social Style model addresses effective communication by helping individuals understand their verbal and nonverbal communication tendencies through both self ratings and multi-rater assessments. This added layer of objectivity from co-worker feedback can help an individual understand how his or her behavior is perceived and how it effects interactions in the workplace.⁷⁹ While the Social Style model emphasizes management training, its interpersonal skill focus could have leadership development implications as well. Like the MBTI and DiSC, the Social Style model's self-assessments can be completed using an online system. This model is available at TRACOM's LearningSurveys.com and can be completed prior to attending an interpersonal skills training program.

In September 2007, Kurt Kraiger, Ph.D., from the Center for Organizational Excellence at Colorado State University and Stephen Kirkpatrick, Ph.D., from Regis Learning Solutions conducted an evaluation of the effectiveness of the three interpersonal skill training program alternatives presented thus far: MBTI, DiSC and Social Style. This study consisted of a total of 213 adult participants across 26 different disciplines in industry. A certified facilitator for each specific program trained a portion of the participants on his or her respective interpersonal skills training program.⁸⁰ Regis Learning Solutions derived a set of terminal training objectives that facilitators were to follow when conducting the training. The results from evaluation forms completed at the end of the training program showed there were no differences among the three training programs in terms of participants' perceived usefulness of the training, but that "the Social Style model was found to be the most effective for improving interpersonal skills related to analyzing and responding to the behaviors of others."⁸¹ These conclusions are questionable, however, since the means to assess participant's behavior measure was to first watch a 14-minute

segment from the movie *12 Angry Men*, then analyze and respond to the interpersonal behavior of others.⁸² While mixing up the instruction with a case study is a recommended delivery method, the Air Force will need a more long-term method of practicing interpersonal skills.

Positive Performance, the final alternative presented in this paper, is a tailorable interpersonal skills training program that has been proven to enhance customer service and communication in organizations.⁸³ It applies one of the most common methods used to increase interpersonal communications skills – the training workshop conducted by an outside consultant. However, while fun and engaging for the trainees, some critics say that such workshops often bring only short-term improvements in skills.⁸⁴ What the Air Force needs is a recurring training requirement that ensures the skills are not easily forgotten. Positive Performance offers focused training in several applicable areas of concern to this paper: using email and texting as tools that can support business practices and improve efficiency; training to improve “emotional intelligence” as a means to increase leadership and management effectiveness; and training in the area of effective communication and body language.⁸⁵

The Positive Performance website claims, “We resist the temptation of creating training course from text-book strategies.”⁸⁶ Though innovative and unique, a training philosophy such as this lacks scientific evidence and provides only limited ability to accumulate knowledge across organizations.⁸⁷ Wendy Chalmers Mill’s decision to keep training on an interpersonal level lends credibility to her training style since research shows that simply providing information on ‘how to’ is not sufficient for skill development.⁸⁸ However, this training option may not currently be practical for the Air Force since Ms. Chalmers Mill is based out of the United Kingdom, does not currently have consultants in the U.S., nor does her company offer its services online at this time. Furthermore, though more specific details were derived from professional and timely email correspondence with Ms. Chalmers Mill, none can be presented in

this paper due to a restriction she placed on using that information. While this organization offers training in the interpersonal skills areas needed by the Air Force and though the programs it offers meet the criteria for this analysis, the lack of transparency causes one to question the validity of the training. Additionally, this alternative may not be financially feasible for the Air Force due to the geographic restrictions.

Section 6: Conclusions and Recommendations

The Air Force has been successful in producing many capable leaders. However, the evolution of technology and world political events demands a leadership development approach that keeps pace.

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Computer-mediated-communication encourages the widespread exchange of information and connects individuals. Means of high technology communication should not cause leadership failures if used properly. They should be recognized as tools to more effectively and efficiently manage an individual's workload. They should not interfere with interpersonal communication or a leader's ability to influence, motivate or discipline his or her airmen. Rather one should keep a healthy balance between the virtual world and the physical world by establishing appropriate "boundaries" such as determining the length and time one is available to others in order to avoid being dominated by technology. The Air Force's future leaders should balance electronic communication with face-to-face and verbal forms of communication to be more effective. To help in this effort, the Air Force should educate its new officers on the pitfalls of relying too heavily or exclusively on computer-mediated-communication. It should provide recurring, interactive and flexible training that will enhance its airmen's interpersonal skills for the long-term.

This research does not recommend MBTI, DiSC or Social Style for use as stand-alone interpersonal skills training programs because, individually, they do not effectively address the criteria. Wendy Chalmers Mill's Positive Performance interpersonal skills training program meets the criteria but may not currently be a practical solution due to the geographical barrier. However, this latter program offers the most promise for addressing the pitfalls of relying too heavily on high technology communication devices.

This research recommends using a mix of attributes from the alternatives to improve the Air Force's future leaders' interpersonal skills. As the 2007 study by Dr. Kraiger and Dr. Kirkpatrick revealed, subjects prefer interpersonal skills training programs that use a combination of lecture, facilitated discussion, small group exercises and role-plays.⁸⁹

Furthermore, the research recommends using a pre-course contact self-assessment as a lead-in to an interpersonal skills training program that follows a course-break-course framework. This type of program typically begins with a week-long session focused on developing personal leadership improvement plans (course) followed by approximately three months of implementation (break). The follow-up course consists of review, modifications and feedback on an individual's progress. Organizations such as the Ford Motor Company have had success with this type of program.⁹⁰ It is likely that the Millennial Generation airmen may not want to attend or partake in interpersonal skills training. Incorporating a follow-up course is one way to address this as it adds accountability and realism to an individual's plan that was formulized in the initial training session.

Building on this construct and pending feedback from AFROTC cadets who were introduced to the DiSC assessment in fall 2009, this paper recommends DiSC as the pre-course contact self-assessment. The Air Force is already using this instrument which would make it easier and more cost effective to apply to another venue. The purpose for using DiSC is to

initiate the learning process through self-awareness as a lead-in to the initial interpersonal skills training course. This model is chosen over MBTI for its focus on behavioral tendencies rather than personality preferences and its ability to address leadership competencies directly.⁹¹

The mix of applicable focus areas and delivery techniques offered by both Social Style and Positive Performance make them ideal choices for models of the main and follow-up courses. Social Style allows participants to play leadership roles in realistic work simulations, while Positive Performance addresses the recommended use of high tech communication devices for accomplishing the mission. Positive Performance also provides guidance on effective communication. Both programs allow participants to take part in face-to-face discussions and practice the intangible leadership skills: influence, discipline and motivation.

Neither Social Style nor Positive Performance meets all the criteria as stand-alone training programs, but the Air Force could develop its own training course using the aspects which meet the criteria from these models as a baseline. The cost to the Air Force would include participating in Social Style and Positive Performance training in order to learn how to formulate a new program. Professional Learning Systems offers different Social Style training options. The recommended option is its “Producing Results with Others” program which costs \$350 per person plus \$2400 per day for program facilitation and instructor travel and expenses.⁹² The applicable courses from Positive Performance cost between an average of \$1300 to \$1900 per day⁹³ plus the added expense for traveling to and staying in the United Kingdom for the duration of the training. In all, these programs’ training costs are comparable with other interpersonal skills training program options but may still be considered too expensive given budget shortfalls across the Air Force.

An alternate option for gaining insight into Social Style and Positive Performance could be to request online training. Positive Performance is not currently offered online but it may be

in the near future. However, a risk with this approach is that much is lost in the translation unless the trainer is proficient in communicating effectively across the medium and the recipient has the required equipment and time to practice skills. Taking the in-person approach, once the Air Force trains a select few individuals, it can develop its own training program to address unique situations such as leadership in combat. The Jeanne M. Holm Center for Officer Accession and Citizen Development Center's Curriculum Directorate office is recommended as the office of primary responsibility for this effort due to its experience in Air Force ROTC and Officer Training School leadership and management curriculum development.

The course-break-course framework for interpersonal skills training should be incorporated into accessions courses as well as Air and Space Basic Course, Squadron Officer School and Air Command and Staff College (ACSC) which typically take airmen a few months to a few years to complete. The ACSC On-Line Master's Degree Program recently added a leadership concentration of study for captains in January 2010. This is a good test bed for the PME framework if Air University agrees it is important and will put resources against it. Competing requirements at Air University may deem this recommendation as unnecessary, however, since the courses which make up the leadership concentration are already in place.

In all, the Air Force should view this recommendation as an opportunity to continually educate its future leaders on how to use technology effectively and not be overcome by it at the expense of leadership. In its continuous effort to bring technology to the warfighter, the Air Force can use this training model as a means for constant improvement of its processes at all levels of PME and leader development.

The Air Force could also expand the follow-up course application area and have participants' latest interpersonal skills training performance evaluated by qualified officers in established intervals throughout an airman's career. A performance feedback session is one pre-

established venue. Timely and persistent feedback that is individually-focused and comes from an expert will go a long way towards improving interpersonal skills. Overall, this solution realizes for new behaviors to take hold, interpersonal skills development needs active and persistent coaching that extends beyond the initial training course and supports long-term leadership improvement.

Section 7: Conclusion

This paper discussed the advantages and disadvantages of means of high tech communication that the Millennial Generation has known all its life and that the Digital Immigrants have come to accept. Next it introduced self-assessment, effective communication, leadership development, management skills and training delivery method as five important criteria that should be met by an interpersonal skills training program that keeps pace with technology and relates to the needs of the Air Force's future leaders. The four alternatives: MBTI, DiSC, Social Style and Positive Performance were described then evaluated against the criteria. The comparison of the alternatives revealed that no one interpersonal skills training program alternative discussed meets the criteria as it is currently offered. Rather, a combination of the latter three training programs is recommended as part of a course-break-course framework that can be adapted to accessions and PME-level courses then continuously evaluated throughout an airman's career.

Communication is fundamental to leadership and interpersonal skills are vital to mission accomplishment. Airmen are charged with making the best use of cyberspace technology to meet the needs of the Air Force. They can do this while fostering an organizational culture which protects leadership by balancing the use of high tech communication with the continuous development and practice of interpersonal skills.

Notes

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- ¹ Croom, "Guarding Cyberspace," 69.
- ² *BusinessDictionary.com*, s.v. "Generation Y," <http://www.businessdictionary.com/definition/Generation-Y.html> (accessed 17 Jan 10).
- ³ AETC, *On Learning: The Future of Air Force Education and Training*, 13.
- ⁴ *Ibid*, 13.
- ⁵ *BusinessDictionary.com*, s.v. "Generation X," <http://www.businessdictionary.com/definition/Generation-Y.html> (accessed 17 Jan 10).
- ⁶ Pritchard, "Competency-Based Leadership for the 21st Century," 26.
- ⁷ T-107, 2009/2010, 108.
- ⁸ T-307, 2007/2008, 3.
- ⁹ Pritchard, "Competency-Based Leadership for the 21st Century," 24.
- ¹⁰ Brig Gen Mike Bissell (Commandant of Cadets, Virginia Women's Institute for Leadership), interviewed by the author, 12 December 2008.
- ¹¹ AFDD 1-1, *Leadership and Force Development*, 27.
- ¹² Kraiger and Kirkpatrick, "An Evaluation of the Effectiveness of Three Popular Training Programs," 5.
- ¹³ Jumper, address.
- ¹⁴ Fallows, "Email at Work," 2.
- ¹⁵ US Office of Personnel Management, "Supervisors in the Federal Government," 3.
- ¹⁶ CPP, "Air Force Acquisition Takes the Leadership Challenge," 1.
- ¹⁷ Mehrabian, *Nonverbal Communication*, 182.
- ¹⁸ Kron, "Cross-Cultural Considerations for the United States Security Cooperation in the Middle East," 76.
- ¹⁹ *Ibid*, 77.
- ²⁰ Kirwan-Taylor, "Got the Msg?" 25.
- ²¹ Menand, "Thumbspeak," 3.
- ²² Fallows, "Email at Work," 10.
- ²³ Col L.E. Hurlbut (Deputy Commandant for Cadet Life, Virginia Military Institute), interviewed by the author, 21 January 2010.
- ²⁴ Associate Press-AOL, "2007 Instant Messaging Poll," 10.
- ²⁵ Bacal, *Conflict Prevention in the Workplace*, 86.
- ²⁶ McQuillen, "The Influence of Technology on the Initiation of Interpersonal Relationships," 617.
- ²⁷ *Ibid*.
- ²⁸ Santa Cruz, "Americans Have Gone Text-Crazy," 18.
- ²⁹ Dumaine, "Leadership in Writing," 52.
- ³⁰ Pinder, *Work Motivation in Organizational Behavior*, 334.
- ³¹ Fallows, "Email at Work," 9.
- ³² Santa Cruz, "Americans Have Gone Text-Crazy," 18.
- ³³ Smith, *Commanding an Air Force Squadron*, 128.
- ³⁴ DuBrin, *Applying Psychology*, 272.
- ³⁵ Lenhart, "Writing, Technology and Teens," 21.
- ³⁶ *Ibid*, 24.
- ³⁷ *Ibid*, 28.
- ³⁸ TRACOM Group, "Creating More Effective Managers Through Interpersonal Skills Training," 3.
- ³⁹ Boyd, "Leadership and High Technology," 229.
- ⁴⁰ Croom, "Guarding Cyberspace," 69.
- ⁴¹ AFDD 1-1, *Leadership and Force Development*, 14.
- ⁴² *Ibid*, 9.
- ⁴³ *Ibid*, 27.
- ⁴⁴ *Ibid*, 41.
- ⁴⁵ Ulmer, address.
- ⁴⁶ *Ibid*.
- ⁴⁷ AFDD 1-1, *Leadership and Force Development*, 10.
- ⁴⁸ *Ibid*, 16.
- ⁴⁹ AETC, *On Learning: The Future of Air Force Education and Training*, 5.

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- ⁵⁰ Ibid, 11.
- ⁵¹ Hanser, *Planting the Seeds of Future Leaders*, 31.
- ⁵² Ibid, 30.
- ⁵³ Myers Briggs Type Indicator, "Theory Behind the Model," <http://web.cortland.edu/andersmd/learning/MBTI.htm>.
- ⁵⁴ Ibid.
- ⁵⁵ Disc Profile, "The Facts," <http://www.discprofile.com/williammoultonmarston.htm>.
- ⁵⁶ Inscape Publishing, "A Comparison of the Personal Profile System and MBTI Research Report," 9.
- ⁵⁷ The Minton Company, "DiSC Preview, Version 3.0," 3.
- ⁵⁸ TRACOM Group, "Creating More Effective Managers Through Interpersonal Skills Training," 4.
- ⁵⁹ TRACOM, "Social Style Model," <http://www.tracomcorp.com/training-products/model/style-descriptions.html>.
- ⁶⁰ Positive Performance's official Web site, "Training," <http://positive-performance.com>.
- ⁶¹ Ibid.
- ⁶² Ibid.
- ⁶³ The Myers and Briggs Foundation, "MBTI Basics," <http://www.myersbriggs.org/my-mbti-personality-type>.
- ⁶⁴ ACSC On-Line Master's Program, *Leadership in Warfare*, 2-3.
- ⁶⁵ McCrimmon, "Auditing Leadership Talent," 3.
- ⁶⁶ The Myers and Briggs Foundation, "MBTI Basics," <http://www.myersbriggs.org/my-mbti-personality-type>.
- ⁶⁷ Michael, "Using the Myers-Briggs Type Indicator as a Tool for Leadership Development?" 76-77.
- ⁶⁸ Doo, "A Problem in Online Interpersonal Skills Training," 264.
- ⁶⁹ Michael, "Using the Myers-Briggs Type Indicator as a Tool for Leadership Development?" 78.
- ⁷⁰ Nath to AFROTC Region and Detachment Commanders, memorandum.
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- ⁷² McCrimmon, "Auditing Leadership Talent," 1.
- ⁷³ Inscape Publishing, *DiSC Classic 2.0*, 3.
- ⁷⁴ Ibid, 15-23.
- ⁷⁵ Kraiger and Kirkpatrick, "An Evaluation of the Effectiveness of Three Popular Training Programs," 4.
- ⁷⁶ TRACOM, "Social Style Model," <http://www.tracomcorp.com/training-products/model/style-descriptions.html>.
- ⁷⁷ TRACOM, "Versatility," <http://www.tracomcorp.com/training-products/model/versatility.html>.
- ⁷⁸ Wilson, "Newer Views of Learning," <http://www.uwsp.edu/Education/lwilson/learning/emot.htm>.
- ⁷⁹ TRACOM Group, "Creating More Effective Managers Through Interpersonal Skills Training," 4.
- ⁸⁰ Ibid, 9.
- ⁸¹ Ibid, 2.
- ⁸² Ibid, 12.
- ⁸³ Donald, "Dependence on Email 'Costs Scots Business Millions,'" 50.
- ⁸⁴ Aamodt, *Industrial/Organizational Psychology*, 395.
- ⁸⁵ Positive Performance's official Web site, "Training," <http://positive-performance.com>.
- ⁸⁶ Ibid.
- ⁸⁷ Offerman and Spiros, "The Science and Practice of Team Development," 388.
- ⁸⁸ Doo, "A Problem in Online Interpersonal Skills Training," 270.
- ⁸⁹ Kraiger and Kirkpatrick, "An Evaluation of the Effectiveness of Three Popular Training Programs," 9.
- ⁹⁰ Conger, "The Brave New World of Leadership Training," 56.
- ⁹¹ McCrimmon, "Auditing Leadership Talent," 1.
- ⁹² VeVerka to the author, e-mail.
- ⁹³ Chalmers Mill to the author, e-mail.

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